

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: William S. Johnson

Examiner: Kiss, Eric B.

Serial No. 09/560,473

Art Unit: 2122

Filed: 04/28/2000

For: **SOFTWARE DOWNLOAD SYSTEM AND METHOD FOR AUTOMATIC  
RETRIEVAL OF ROYALTY, WARRANT, AND COMMISSIONING DATA**

Commissioner for Patents

Washington, D.C. 20231

RECEIVED

MAR 18 2003

Technology Center 2100

Sir:

**DECLARATION UNDER 37 C.F.R. § 1.131 OF STEVEN N. TERRANOVA**

1. My name is Steven N. Terranova and I was formerly General Patent Counsel for Gilbarco Inc, the assignee of the present application until October 31, 1999.
2. Starting on November 1, 1999, I was employed as a patent attorney at the law firm of Coats & Bennett, PLLC until January 14, 2001.
3. On July 12, 1999, I received the power point presentation in Exhibit A from William Johnson, an employee of Gilbarco at that time.
4. After July 12, 1999, I sent the power point presentation in Exhibit A to Coats & Bennett, PLLC for docketing to consider inventions embedded therein.
5. Between July 12, 1999 and December 1, 1999, I studied in power point presentation; and on December 19, 1999 I send a letter to William Johnson indicating outlining how the inventions in the power point presentation could be differentiated and outlined the strategy that would be taken with respect to preparing patent applications.
6. Between December 1, 1999 and January 23, 2000, I presented the inventions in William Johnson's power point presentation to the Gilbarco Patent Committee for consideration. The

Gilbarco Patent Committee authorized an application at least by January 24, 2000 as evidenced by the memo in Exhibit B.

8. Subsequently, I conducted a patent search and prepared and sent a patentability opinion for the above styled invention to William Johnson on March 2, 2000 (see Exhibit C).


9. Therefore, between March 3, 2000 and April 6, 2000, I prepared a draft of a patent application and sent same to William Johnson (see Exhibit D).

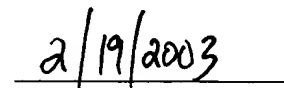
10. On June 1, 2000, the final draft of the application was sent again to William Johnson when he told me that he had never received the original application (see Exhibit E).

11. Gilbarco and the law firm of Coats & Bennett addressed their work in a First In-First Out manner.

12. The application was filed on July 6, 2000 after continuous diligence from conception to constructively reduce Mr. Johnson's invention to practice filing.

13. I hereby declare that all declarations made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
\_\_\_\_\_  
Steven N. Terranova

  
\_\_\_\_\_  
Date

## **EXHIBIT A**

*Encore/Eclipse Software*

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*Business Issues  
and  
New Infrastructure Requirements*

# *Issues for Encore/Eclipse*

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## Business Issues

- **Must** pay royalties on SUN OS used in the Encore/Eclipse CRIND.
- Other data collection requirements and business issues derive from the one above.

## New Infrastructure Requirements

- Need changes to support the collection of data to support the business issues.

# *Driving Requirements for Encore/Eclipse*

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## Must:

- track SUN OS upgrades for royalty payments.
- have Downloadable Software.
- have Local/Remote Diagnostics.

## Want to:

- track all software downloads and upgrades.
- pay warranty and commissioning fees through electronic data.

# *Software Royalty Situation*

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We will pay the SUN OS licenses for CRIND at time of manufacture at USA Halstead.

Upgrades in the field that have the same SUN OS version **will not** need a royalty payment.

Upgrades in the field that install a newer SUN OS **will** require a royalty payment.

No royalties will be owed due for Dispenser upgrades - ever. We own paid up unlimited distribution rights for the dispenser OS.

# *Field Operation Solutions*

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Uses Laptop Computer as main field tool

- Tracks SUN OS upgrades.
- Performs Software downloads.
- Collects diagnostic data.
- Programs dispenser/CRIND functionality.
- Tracks Board replacements.
- Tracks Warranty repairs.
- Collects Commissioning data.



# *How Do We Get the Data Back?*

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- We must get the ASC to reconnect the laptop to our Web Site for information retrieval.

How can we ensure this?

- Only pay warranty from this data.
- Only pay commissioning fees from this data.

# *What's Needed at Gilbarco?*

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Changes required for our Web Site.

- Support the Encore/Eclipse software distribution over the WWW.
- Support the laptop operating software distribution over the WWW.
- Support data retrieval from the laptop over the WWW.

# *Three Development Phases*

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## First phase

- Field support for Encore/Eclipse.
- Distribution of software products.
- Factory support.

## Second Phase

- Remote software download.
- Remote diagnostics retrieval.
- Remote problem notification.

# *Development Phases* (continued)

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## Third Phase

- Interconnectivity between Gilbarco departments for distributing information.

# *Second Phase Status*

## *- Remote Download & Diagnostics*

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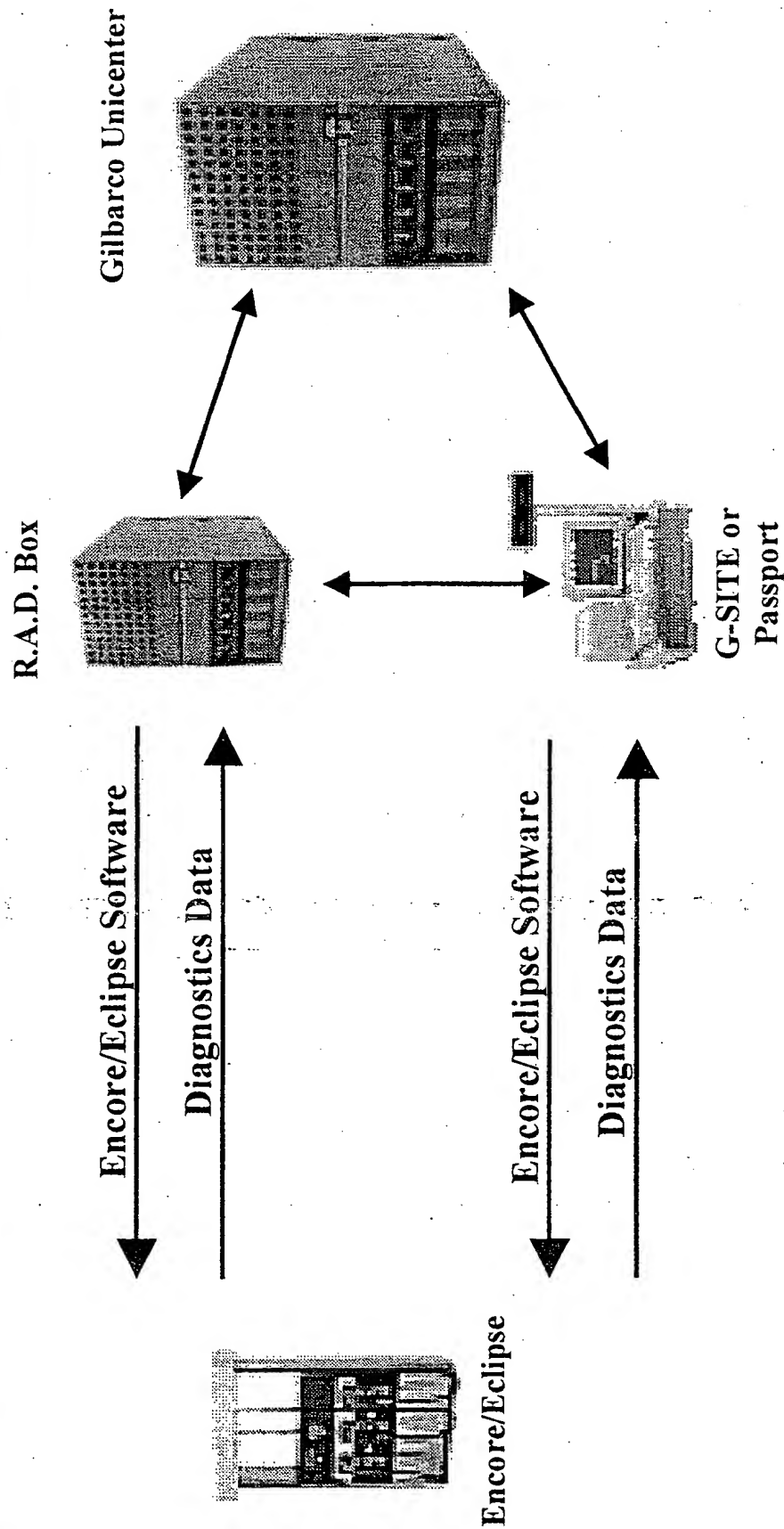
Working with RAP groups for:

- CRIND browser design.
- Dispenser functional definitions.
- Communications standards.
- RAD box interface.
- Communicating with other departments.

# Data Flow Diagram

## Second Phase

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## **EXHIBIT B**

**COATS & BENNETT, PLLC**

P.O. Box 5  
Raleigh, NC 27602

(919) 854-1844 (Office)

(919) 854-2084 (Fax)

# Memorandum

To: Bill Johnson

From: Steve Terranova

Date: 1/24/00

Re: Gilbarco PM #9949 2400-419

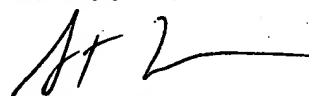
"Software Download System & Method for Automatic Retrieval of Royalty,  
Warranty and Commissioning Data"

The patent committee decided to pursue your idea for patent protection. The next step in the process is to perform a patentability search on your invention to determine if it contains patentable subject matter. After the search and report has been completed, I will be in contact with you to discuss the details of the invention to begin preparing an application.

Thank you for your idea submission. I will log you down as a patent award for this matter at this time of \$100 for the submission.

If you have any questions whatsoever, please feel free to call me at 919-854-1844.

Very truly yours,

  
Steve Terranova

**DOCKETED**

JAN 31 2000

1



## **EXHIBIT C**



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Suite 206  
Cary, North Carolina 27511  
tel: 919-854-1844  
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Patents, Trademarks,  
Copyrights, Trade Secrets,  
Licensing, and  
Related Litigation

Patent Attorneys  
Larry L. Coats  
David E. Bennett  
Benjamin S. Withrow  
John R. Owen  
David D. Kalish  
Steven N. Terranova  
Taylor M. Davenport

Patent Agent  
Michael D. Murphy

**Confidential/Privileged  
Attorney-Client Communication**

March 2, 2000

Mr. Bill Johnson  
Marconi Commerce Systems Inc.  
7300 West Friendly Avenue  
P.O. Box 22087  
Greensboro, NC 27420-2067

copy: Mr. Charles E. Carlson, Esq.  
(without enclosures)

**RE: Patentability Opinion for Software Download System and Method for Automatic Retrieval  
of Royalty/Warranty and Commissioning Data  
Marconi Ref. No.: PM 9948  
Our File No: 2400-419**

Dear Bill,

At the request of the Patent Committee, we have conducted a patentability search in the United States Patent and Trademark Office regarding the above-referenced invention. Results from our search and study are summarized below, followed by a more detailed discussion.

**Summary**

Based on results of our search, patent protection appears available for some aspects of the invention disclosed in PM 9948, specifically Phase II of that disclosure. In particular, the invention relates to a method of updating software in a fueling environment from a central corporate computer. A number of patents show updating software remotely over a network. However, these patents do not appear to be directed to a fuel dispensing environment, or do not show the particular accounting that may be tracked as presented in Phase II of PM 9948.

**Description of the Invention**

The present invention relates to a corporation, such as Marconi Commerce Systems, providing remote software updates to fueling environments. In particular, the corporation has a

database that lists all the sites that have corporation equipment, the type, and the software that is presently installed at that site. As compatible software updates are created they are made available to the site from the corporate computer through a network such as the Internet, a direct dial-in line, or the like. Once the site has accessed the corporate computer containing the available update, appropriate accounting is accomplished to complete the transaction. Additionally, the database having the information about the site is updated. An additional feature disclosed is the fact that before the download of the information occurs, an intelligent agent may verify that the hardware and software presently resident at the site are compatible with the update requested. Alternatively, the corporation may initiate the updates automatically.

### **Prior Art**

Several patents containing matter related to the disclosure of PM 9948 were discovered during the course of the search. Primary references appear in the table immediately below. Related references also appear with the letter directed to Phase I of your invention, our file number 2400-418.

<b>Patent Number</b>	<b>Inventor</b>	<b>Assignee/Notes</b>
5,109,486	Seymour	Motorola, Inc.
5,845,077	Fawcett	Microsoft Corp.
5,812,857	Nelson et al.	Extended Systems, Inc.
5,758,071	Burgess et al.	Electronic Data Systems Corp.
5,805,897	Glowny	IBM
5,689,640	Okanoue	NEC Corp.
5,999,740	Rowley	International Computers Ltd.
5,893,118	Sonderegger	Novell
5,881,236	Dickey	Hewlett-Packard
5,828,887	Yeager et al.	Electronic Data Systems Corp.
5,421,009	Platt	Hewlett-Packard
5,473,772	Halliwell et al.	IBM
5,155,847	Kirouac et al.	Minicom Data Corp.
5,666,293	Metz et al.	Bell Atlantic
4,714,992	Gladney et al.	IBM
5,974,454	Apfel et al.	Microsoft Corp.
5,835,911	Nakagawa et al.	Fujitsu Ltd.
5,806,078	Hug et al.	Softool Corp.

Copies of all of the above references are enclosed for your review.

### Detailed Discussion of Search Results

The Seymour Patent No. 5,109,486 discloses a system for resource updating within a computer network. Resources may include new hardware, new clients within the network, or new software. The network is updated upon the detection of new resources. There is no disclosure of using the invention in a retail environment or responding to a request that the software on the remote device be updated.

The Fawcett Patent No. 5,845,077 discloses an update service for software. The user of the software calls the update service on a periodic basis. The update service automatically inventories the user computer to determine what computer software may be out of date or need updates. The user then indicates what updates are desired. The update is automatically downloaded and installed on the remote computer. The update service may also alert the user as to the existence of new updates. There is no disclosure of using the invention in a retail environment or as part of a large pre-existing network. Additionally, there does not appear to be any disclosure related to the database management.

The Nelson et al. Patent No. 5,812,857 discloses downloading firmware upgrades to a targeted remote computer over a network. The entire process is automated so that there is little if any human involvement. Networks specifically contemplated are the Internet and private company networks. The downloading device may be updated in the process.

The Burgess et al. Patent No. 5,758,071 discloses automatically tracking the configuration of a computer coupled to a computer network. Tracking enables the creation of a database for detailing the configurations of all the computers in the network. One purpose to which the database is put is the maintenance of a history of the software updates that the remote computer has undergone. Further contemplated are automatic upgrades of software to particular computers based on the information in the database.

The Glowny Patent No. 5,805,897 discloses a system for remote software installation and maintenance on a computer network. It includes a distributed software repository, local and remote installation mechanisms, and progress tracking facilities. Additionally, specifically disclosed is the use of an encryption key or other access control mechanism to ensure only proper updates are installed.

The Okanoue Patent No. 5,689,640 discloses a network system having an update data file. It provides a particular technique by which files may be replaced on remote computers by the update file. In particular, an effort is made to minimize the interruption of usage of the network or the computer being updated.

The Rowley Patent No. 5,999,740 discloses a computer having a registration file including version information about the software presently stored on the computer. The computer periodically checks a remote file server to determine if there are updates available by comparing the present versions indicated in the registration file to a corresponding file on the

remote file server. Additionally, a manifest file checks the files on the computer to determine exactly what is required for a given update.

The Sonderegger Patent No. 5,893,118 discloses a method for managing dispersed software components and particularly the security concerns associated therewith. It specifically contemplates the need to track components for licensing and accounting purposes. The patent goes on to define an alternative to JAVA script such that secure transmissions may be ensured.

The Dickey Patent No. 5,881,236 discloses a method of installing software on a remote computer with security issues being addressed. The software is sent automatically over a network. It is primarily directed to running software on the remote computer, wherein the running is triggered by the server in the network, but it does discuss sending the software to the remote computer and talks about upgrading previously installed components. Further, there are provisions for checking the version of the software presently being run on the remote computer.

The Yeager et al. Patent No. 5,828,887 discloses a method for loading software at a remote computer from a server over a network. In particular, the remote computer includes a program loader software module that accesses the server and downloads the desired software for installation. The invention is specifically directed to allowing user specific files to be created so that a user may use a different terminal within the network.

The Platt Patent No. 5,421,009 discloses remotely installing software directly from a central computer. The system disclosed has the ability to check the remote computer to see if it has the ability to run the software, specifically checking the available memory, the hardware and software to support the installation, and all the commands to support the installation.

The Halliwell et al. Patent No. 5,473,772 discloses a computer network adapted to receive calls from or for remote computers at a host computer. These calls request updates of static or dynamic software for use at the remote computer. Updates are then sent over the network from the host computer to the remote computer.

The Kirouac et al. Patent No. 5,155,847 discloses a method for updating software at remote locations from a central location in a computer network. The remote computers are allowed communicative access to the central computer to compare version information such that all changes are detected. The changes are then transmitted to the remote computer.

The Metz et al. Patent No. 5,666,293 discloses a method of wirelessly downloading system software through a broadcast medium. Specifically contemplated is the downloading of system software to set top terminals. The protocol for the set top terminal to detect a new operating system is detailed.

The Gladney et al. Patent No. 4,714,992 discloses managing data objects in a distributed network. As part of the management, version information is stored such that obsolete versions

Mr. Bill Johnson  
March 2, 2000  
Page 5 of 5

are deleted. The system checks for later versions so that obsolete versions may be identified. However, the active versions are still accessible by the distributed components of the system.

The Apfel et al. Patent No. 5,974,454 discloses a technique to update software over the Internet by comparing dates of the version resident on a remote computer to a date of a version on the host computer. The user is prompted to initiate the update, but the actual upgrade is automated.

The Nakagawa et al. Patent No. 5,835,911 discloses a system for automatically updating software in a computer network by comparing version numbers. The remote computer automatically updates the software to the latest version according to the update instruction information received from the host computer. The remote computer can automatically initiate inquiries at predetermined times.

The Hug et al. Patent No. 5,806,078 discloses version management for shared documents in a word processing or spreadsheet context. The versions are updated amongst the computers sharing the document such that obsolete versions are deleted and changes are shared amongst the users.

#### **Opinion on Patentability**

The above-mentioned references and the references attached to the related letter on Phase I appear to focus on direct computer-to-computer software updates. Thus, the broad concept presented in Phase II does not appear to be patentable. Additionally, the references located deal with a number of specific methods by which versioning information may be obtained and updated in the remote unit. However, the specific implementation in a fueling environment and some of the accounting elements of the invention may still be eligible for narrow, but meaningful patent protection.

#### **Closing**

Additional information regarding the subject matter of the disclosure may be necessary during the preparation of a patent application. However, the disclosure contains sufficient information to begin preparation. We will proceed with preparing the application and will contact you as necessary. As always, if you have questions or comments, please do not hesitate to call.

Very truly yours,

  
Steve Terranova

ST/bh

Enclosures

## **EXHIBIT D**



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Patents, Trademarks,  
Copyrights, Trade Secrets,  
Licensing, and  
Related Litigation

**Confidential and Privileged  
Attorney-Client Information**

April 6, 2000

Mr. William S. Johnson, Jr.  
Marconi Commerce Systems Inc.  
7300 West Friendly Avenue  
P.O. Box 22087  
Greensboro, NC 27420-2087

cc: Mr. Charles E. Carlson, Esq.  
(w/o enclosures)

Patent Attorneys  
Larry L. Coats  
David E. Bennett  
John R. Owen  
David D. Kalish  
Steven N. Terranova  
Taylor M. Davenport  
Edward H. Green III

RE: Patent Application for:  
**SOFTWARE REMOTE DOWNLOAD METHOD FOR AUTOMATIC  
RETRIEVAL OF ROYALTY AND WARRANTY INFORMATION**  
Your Ref: PM 9949  
Our File No: 2400-419

Dear Bill,

Enclosed please find an original of the formal patent application, Declaration and Assignment for the above-referenced invention. Please review the application carefully for accuracy and completeness, making any changes, additions or corrections directly on the application. Please pay particular attention to the claims at the end of the application to see if all novel features are included.

Note that particular attention should also be paid to the section titled "Detailed Description of the Invention." Please initial and date each change in either the left or right margin next to the change. Then, please sign the attached Declaration and Assignment where indicated. The Power of Attorney has been sent to Chuck Carlson directly.

Please return the signed originals of the application and forms to me for filing with the United States Patent Office.

Thank you for allowing us to be of service to you in this matter.

Very truly yours,

Steve Terranova

SNT/mjp

Enclosures



## **EXHIBIT E**



COPY

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NOTE: Resending 6/1/2000  
per Bill Johnson's request  
(he didn't receive April 6  
mailing).

**Confidential and Privileged  
Attorney-Client Information**

April 6, 2000

Mr. William S. Johnson, Jr.  
Marconi Commerce Systems Inc.  
7300 West Friendly Avenue  
P.O. Box 22087  
Greensboro, NC 27420-2087

cc: Mr. Charles E. Carlson, Esq.  
(w/o enclosures)

Patents, Trademarks,  
Copyrights, Trade Secrets,  
Licensing, and  
Related Litigation

Patent Attorneys  
Larry L. Coats  
David E. Bennett  
John R. Owen  
David D. Kalish  
Steven N. Terranova  
Taylor M. Davenport  
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RE: Patent Application for:  
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Steve Terranova

SNT/mjp

Enclosures